

RE: Global Traffic Technologies LLC
FCC ID: VJB-OPTICOMGPS4
IC: 7275A-OPTICOM4

Please confirm that each channel is used equally on average, per 15.247(a)(1) and RSS247)5.1)1). For example, do subsequent transmission events always begin on a different channel in the hopping sequence? Please clarify.

Response: The channels are used evenly on the average. Frequencies are listed in pseudo random order. Each transmit (and receive) frame uses a frequency from the table as selected by the hop table index. The hop table index starts at zero and is incremented on each frame. When the index has reached the end of the table it is reset back to zero. Please refer to Exhibit 15 for a sample of the hop table.

Regarding the response to comment 5, it does not appear that the requirement specified in Section 15.247(h) has been addressed. The Rule pertains to FHSS system operation, i.e., pairs of transceivers communicating with one another. While a transceiver may independently modify its hopping pattern (adaptive hopping) based on its RF environment, no form of coordination between systems is permitted, including coordination of the transmission timing between separate systems that may all be using the same hopping pattern, with no adaptations. The intent is to disallow multiple systems from operating in lock-step with one another, effectively monopolizing the spectrum and blocking out other users by virtue of the higher powers permitted for 15.247 operation. Please confirm that the EUT does not coordinate between FHSS systems with the express purpose of avoiding simultaneous occupancy of a single hopping channel by multiple transmitters.

Response: The EUT does not coordinate between FHSS systems with the purpose of avoiding simultaneous occupancy of a single hopping channel by multiple transmitters. All the devices in the system uses the same hop table with the same offset, no additional bandwidth is used compared to just one device transmitting and one device receiving. Any transmissions are going to be on the single selected hop frequency at any one time so channels are not combined for additional throughput.